

**Claims**

1. Carbon monoxide sensor apparatus comprising pre-treatment means and sensor means, in which the pre-treatment means comprises an aqueous medium to absorb contaminating substances from a gaseous test substrate and catalytic means to convert contaminating substances to non-contaminating substances at ambient temperatures.
2. Apparatus according to claim 1, in which the pre-treatment and sensor means are contained in separate chambers in mutual communication, the pretreatment chamber including access means for the gaseous test substrate.
3. Apparatus according to claim 1 or claim 2, in which the sensor means comprise an electrochemical sensor comprising two electrochemically-active electrodes separated by an electrolyte absorbed on a porous substrate.
4. Apparatus according to claim 3, in which the sensor electrodes comprise a precious metal as catalyst.
5. Apparatus according to claim 4, in which the catalyst is disposed on a porous support.
6. Apparatus according to claim 4, in which the catalyst is applied direct to the electrode surface in finely-divided form.
7. Apparatus according to any of claims 3 to 6, in which the porous substrate comprises a plastics polymeric material.
8. Apparatus according to any of claims 3 to 7, in which the electrolyte is acidic.
9. Apparatus according to any preceding claim, in which the aqueous medium contains sulphuric acid or other water-retention substance.
10. Apparatus according to any preceding claim, in which the aqueous medium is absorbed on a solid absorbent matrix.
11. Apparatus according to any preceding claim and including a porous barrier to exclude airborne particulates from the pre-treatment means.

13-07-2001

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12. A method for sensing the presence of carbon monoxide in a gaseous test substrate which may also contain contaminating substances, the method comprising pre-treating the substrate by passage thereof through an aqueous medium to absorb any contaminating substances at ambient temperatures and to convert said contaminating substances to non-contaminating substances and testing the residue of the test substrate for the presence of carbon monoxide.

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